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REMARKS

Reconsideration and further examination is respectfully requested.

Rejections under 35 U.S.C. §103Claims 1,2,3,5,6,8,10,11, 13 and 15:

Claims 1, 2, 3, 5, 6, 8, 10, 11, 13 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Saleh, (U.S. Patent Application publication 2003/0058804A1); hereinafter Saleh, in view of Welland et al. (U.S. 5,247,677, hereinafter Welland).

Saleh, U.S. Application 2003/0058804A1:

Saleh describes a method which provisions a virtual path between a first and a second one of a plurality of nodes by: identifying the first and the second nodes, discovering a physical path from the first node to the second node, and establishing the virtual path. The Examiner relies upon certain portions of Saleh, for example page 4 paragraph 55 of Saleh describes:

“...Changes that occur in the network, whether caused by failed links, newly provisioned connections, or added/failed/removed nodes, are "broadcast" throughout the network, using special protocol packets and procedures. Topology distribution normally runs concurrently with, and in parallel to, failure restoration activities, but at a much lower priority. The directions are most likely to result in a usable route. This has a significant impact on the amount of broadcast traffic used to establish routes in large networks...”

The Examiner states at page 3 of the office action “... Saleh clearly did not disclose the step of raising the operating system task to a high priority level to perform the selected operation. Instead, Saleh discloses (paragraph 55) that some tasks are processed at a lower priority level than the other. Saleh also discloses (paragraphs 99-100)... that when a node receives LSA

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messages, it is first analyzed to determine the appropriate action to be formed. The LSA is then acknowledged by sending back an appropriate response to the node having transmitted the message... It is obvious for one of an ordinary skill in the art, at the time the invention was made, to recognize that when a Hello message is sent out with the LSAs, certain operations need to be performed as appropriate, thus implies boosting the tasks to a higher priority than normal to carry out the actions..."

As best can be understood by the Applicant, it appears that the Examiner's argument is that Saleh teaches that LSA processing is moved to a higher priority when it occurs. Such a conclusion is not based on any teaching or suggestion of Saleh, and is inconsistent with the teachings of Saleh.

Applicants refer the Examiner to the full text of paragraph 55, which states clearly that 'Topology distribution normally runs ... at a much lower priority...' Applicants can only assume that such a statement infers that there *are* relative priorities assigned to tasks, and that topology distribution is assigned a *lower* priority. However, there is not even an inference that the priorities of the *same* task are changes during operation. In fact, a statement that 'LSA distribution is boosted to a higher priority' is totally inconsistent with the teachings of Saleh, which states that 'topology distribution ... runs ... at a much lower priority...'

In response to Applicants above argument, the Examiner states "Regarding Applicant's remark ... in which applicant believes the examiner's conclusion is inconsistent with the teachings of Saleh, the examiner disagrees. Applicant please note "topology distribution ... runs ... at a much lower priority ...." (page 4, paragraph 55) does not mean that task priorities are fix, thus capable of changing..."

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Applicant's believe that the Examiner is trying to say that the task priorities are NOT fixed, and that the priorities of the individual tasks have the capability of changing. However, such a conclusion is not a fair reading of the teachings of Saleh.

Applicant's wish to direct the Examiner's attention to the end of paragraph 55 of Saleh, which describes, of topology distribution "...This has a significant impact on the amount of broadcast traffic used to establish routes in large networks..." Applicants submit that the only fair reading of this statement, by Saleh, is as the *justification* used for performing 'topology distribution ... at a much lower priority...' than other activities.

The Examiner's statement that the task priorities are NOT fixed is simply contradictory to the teachings of Saleh. Although the Examiner states that 'it would be obvious ... to recognize that when a Hello message is sent out with the LSAs, certain operations need to be performed as appropriate, thus implies that boosting the tasks to a higher priority than normal to carry out the actions...', *it would appear that the only teaching provided of such a step is the Applicant's application.* Even given that 'certain operations need to be performed as appropriate', as stated by the Examiner, it is noted that Saleh explicitly states that certain tasks have higher priority than other tasks. So, even if certain operations need to be performed as appropriate, it would appear from Saleh's teachings that the tasks are assigned relative priorities. *No mention is made in Saleh of an individual task that changes priority.*

However, the claims of the present invention are not merely directed to a system that has higher priority and lower priority tasks, but rather to one wherein 'raising the operating system task to a high priority level in order to perform the selected operation in response to a detection of a trigger condition comprising a link state advertising message indicating that the selected

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operation is to be performed..." This novel use of link state advertisements is not shown or suggested by Saleh.

Applicants further suggest that the proposed modification of Saleh, to boost topology distribution to a higher level for forwarding LSA messages would only serve to frustrate bandwidth capability in Saleh. The Examiner is referred to paragraph 77 of Saleh, which describes that 'In the case of a stable network, the majority of transmitted Hello packets are empty (i.e., contain no topology information) because only altered LSAs are included in the Hello messages.' Applicants submit that it would not make sense for Saleh to raise the priority of transmitting routing messages such as the LSA message to a higher priority, as this would only serve to waste bandwidth when the system is stable, wasting bandwidth transferring empty packets.

However, Applicants acknowledge that the Examiner is reading Saleh together with Welland. Although the Examiner states, at page 6 of the office action that "Applicant's arguments against the references individually cannot show obviousness by attacking references individually where the rejections are based on a combination of references.." Applicants submit that a careful reading of Applicants' the last response will show the Examiner that the references were *not* argued individually, but rather that the combination was shown to *together* lack the elements of the Applicant's claim, including "...associating a plurality of routing operations with an operating system task, the plurality of *routing operations including the selected operation ... executing the operating system task at a low priority level prior to performing the selected operation*; and ... *raising the operating system task to a high priority level in order to perform*

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*the selected operation in response to a detection of a trigger condition comprising a link state advertising message indicating that the selected operation is to be performed...*

Welland describes a system wherein "...Tasks are selected for execution stochastically on the basis of a random number *weighted by task priority*. Because every task has a finite nonzero probability of being selected, the probability being proportional to the task priority, the present invention has the advantage that all tasks, even low priority ones, have a chance of being selected, thus eliminating the lockout problem..."

The Examiner relies on column 4, lines 44-62 of Welland, as teaching changing priority levels for tasks. Column 4 recites:

"... Another approach to the lockout problem is to apply small increments to task priorities for short intervals, based on events...Each event has a priority increment associated with it, which may be zero..."

However, Welland specifically recites the problem with such a priority altering scheme, at column 5 when it is described that "The priority increment process adds complexity to the scheduling process. Priority increments must be assigned for each event, and small changes in these increments can dramatically affect system behavior and performance. Furthermore, the lockout problem is not solved by the priority increment process..." Welland thus teaches *against* the desirability of such a system, but rather teaches the desirability of the system of Figure 5.

In determining whether there would be a motivation for combining the teachings of Welland with Saleh, the entire reference of Welland should be considered. For at least the reason that Welland ultimately teaches against the use of shifting priorities for different tasks, Applicants submit that the only fair combination of references would use the system of Welland where priorities are fixed. Because the combination of references neither describes nor suggests

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a system having wherein an operating system tasks is executed at a low priority, then raised to a high priority in response to the detection of *a trigger condition including a link state advertising message*, the combination of references fails to teach the claimed invention. As such, the rejection is under 35 U.S.C. §103 should be withdrawn.

For at least the above reasons, claim 1 is patentably distinguished over the combination of Saleh and Welland. Dependent claims 2-5 serve to further limit claim 1 and are allowable for at least the reasons put forth with regard to claim 1.

The Examiner stated, at page 6 of the office action that 'Applicant's arguments (page 4, 4<sup>th</sup> paragraph and page 5, 1<sup>st</sup> paragraph) fail to comply with 37 C.F.R. 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes from the references. However, Applicants note that the response included that section of the claims previously discussed as being novel. For example, independent claim 6 recites "...task priority control logic operably coupled to execute the operating system task at a low priority level prior to performing the selected operation *and raise the operating system task to a high priority level in order to perform the selected operation upon detection of a trigger condition..*" As mentioned above, the combination of Saleh and Welland neither describes nor suggests the steps of 'raising the operating system task to a high priority ... upon detection of a trigger condition...' and is thus distinguishable over the combination of Saleh and Welland for reasons similar to those put forth above with regard to claim 1. For similar reasons, independent claim 11 is patentably distinct over the combination of Welland and Saleh, which neither describes nor suggests "...task

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priority control logic programmed to execute an operating system task associated with a plurality of operations including the selected operation at a low priority level prior to performing the selected operation *and raise the operating system task to a high priority level in order to perform the selected operation upon detection of a trigger condition...*". Dependent claims 8-10 and 13-15 serve to add further patentable elements to their parent claims, but are allowable for at least the reasons put forth above.

Claims 4, 9 and 14:

Claims 4, 9 and 14 were rejected under 35 U.S.C. §1043 as being unpatentable over Saleh in view of Welland and further in view of Feldman. The Examiner relies on Feldman as teaching the use of a Dijkstra shortest path algorithm. However, the combination of Feldman with Saleh and Welland fails to overcome the fact that the combination does not teach a system having the structure put forth in the independent claims, *wherein the priority of a task is raised in response to a trigger condition*. For at least this reason, claims 4, 9 and 14 are patentably distinguishable over the combination of references, and the rejection should be withdrawn.

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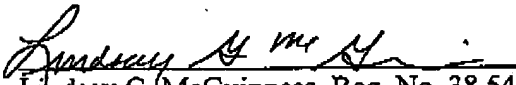
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Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Lindsay McGuinness, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

2/23/05  
Date

  
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